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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,034	03/31/2004	Jean M. Crane	030048139US	7805

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SEATT;E, WA 98111-1247

EXAMINER
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GOINS, DAVETTA WOODS

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 08/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/815,034

Applicant(s)

CRANE ET AL.

Examiner

Davetta W. Goins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 June 2006.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-35 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 29 and 30 is/are allowed.  
6) ☒ Claim(s) 1-28, 31 and 33-35 is/are rejected.  
7) ☒ Claim(s) 32 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/2/06.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

***Allowable Subject Matter***

1. Claims, 29, 30 are allowed.
2. Claims and 32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-9, 19-23, 25-27, 31 and 33-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Smith et al. (US Pat. 6,466,235 B1).

In reference to claims 1-3, 5-9, 23, 25, Smith discloses the claimed method of receiving operations information, presenting a first portion of the operations information over a first area of a display medium, the first area having a first size and receiving a signal corresponding to an instruction to increase a fraction of the display medium occupied by the operations information, and receiving a signal corresponding to an instruction to increase a fraction of the display

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medium occupied by the operations information, which is met by an apparatus used to control displayed flight information on a multi-functional avionics display. The MFD including flight information that will be displayed in any of the quadrants of display 200 of the instrument panel. The pilot is able to control the information that's displayed by concealing a page, displaying various information in different quadrants and toggling between the position and status pages, by use of position page button 608, position page button 608 (col. 3, lines 51-67; col. 4, lines 1-67), and the claimed method of presenting at least the first portion of operations information over a second area of the display medium, the second area having a second size greater than the first size, which is met by depending upon the instrument function selected and its predetermined default display features, the display of that selected function would have a full vertical expansion or a single quadrant display. The FMS initialization function has default display feature such that it will occupy both top and bottom quadrants if either quadrant is selected, and the other quadrant is not currently displaying an instrument function other than the default moving map 202. Display 500 shows an FMS initialization full view top menu bar 508, without any double chevron expansion buttons thereon, because the view is fully expanded. However, display 500 does include an FMS initialization full view, bottom section, manual view compression button 510, which could be used to close down the display in the bottom right hand quadrant if so desired (col. 4, lines 27-52).

In reference to claim 4, Smith discloses the claimed operations information including navigation information, and wherein the first portion includes a map covering a first geographical region, and wherein presenting at least the first portion of the operations information over a second area

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includes presenting a map covering a second geographical region larger than the first geographical region, which is met by an electronic moving map 202 with a reference aircraft 204 therein that can be expanded to show more of the map (second geographical area) on a different quadrant based on the pilot's preference and selection (col. 3, lines 40-63; col. 4, lines 1-53).

In reference to claims 19-23, 25-27, 31, 33-35, Smith discloses the claimed fuselage portion; a wing portion, at least one of the wing portion and the fuselage portion including a flight deck, the flight deck including: a first selector portion having plurality of first settings, with individual first settings corresponding to categories of aircraft operations information; a menu display operatively coupled to the first selector portion and configured to present groups of selectable options, with individual groups corresponding to individual categories of aircraft operations information, the claimed second selector portion at least proximate to the first selector portion, the second selector portion having plurality of second settings, with individual second settings corresponding to individual selectable options presented at the menu display, which is met by display 500 including a compression button 51 (or 512) used to close or change the size of the aircraft information displayed within the various quadrants of the display 500 (col. 27-52), and scroll buttons 906 used to change the type of flight information that should be displayed to the pilot (col. 5, lines 25-39).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 10-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al.

In reference to claims 10-18, Smith discloses the claimed method of receiving operations information, presenting a first portion of the operations information over a first area of a display medium, the first area having a first size, and presenting at least the first portion of the operations information over a second area of the display medium, the second area having a second size greater than the first size, which is met by depending upon the instrument function selected and its predetermined default display features, the display of that selected function would have a full vertical expansion or a single quadrant display. The FMS initialization function has default display feature such that it will occupy both top and bottom quadrants if either quadrant is selected, and the other quadrant is not currently displaying an instrument function other than the default moving map 202. Display 500 shows an FMS initialization full view top menu bar 508, without any double chevron expansion buttons thereon, because the view is fully expanded. However, display 500 does include an FMS initialization full view, bottom section, manual view compression button 510, which could be used to close down the display in the bottom right hand quadrant if so desired (col. 4, lines 27-52). Although Smith does not specifically disclose the claimed method of receiving a signal corresponding to an instruction to increase a fraction of the display medium occupied by the operations information, or the second area occupying approximately a second half of the available display area, he does disclose that the size of the display in one of the quadrants can be increased in size that will be shown in a different quadrant

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to increase the size of the avionics information. Since Smith discloses that the display in the second area by expanding the display that is shown in the first area, it would have been obvious to one of ordinary skill in the art at the time of the invention that the display may receive an instruction to increase a fraction of the display medium or any amount needed to ensure that the first displayed information will be enlarged and shown in a second part of the display.

7. Claims 24 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. in view of Noguchi et al. (US Pat. 6,707,387 B2).

In reference to claims 24, 28, although Smith does not specifically disclose the claimed second selector portion is rotatable to activate an individual selectable option presented at the menu display, he does disclose various inputs for the pilot to operate and change the size of the display as well as the aircraft information that is to be displayed by compression button 510/512 and scroll buttons 906 (col. 4, lines 43-52; col. 5, lines 11-25). Noguchi discloses a MFD for a vehicle (including airplane), the MFD including a screen display device 4 with an operating dial 20 of a multi-function switch 3. The dial is rotated right and left to select various information pertaining to the vehicle that is to be displayed of the display screens (col. 7, lines 6-19; col. 16, lines 19-24). Since Smith discloses a MFD system that includes various buttons to operate and toggle the displays, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of using a rotary input device, as disclosed by Noguchi, with the teaching of Smith, as an alternative means for allowing the pilot to quickly select any information wanted to be displayed.

8. Applicant's arguments with respect to claims 1-35 have been considered but are moot in view of the new ground(s) of rejection.

9. The prior art of record and not relied upon is considered pertinent to the applicant's disclosure as follows. McElreath et al. (US Pat. 6,154,151) and Gyde et al. (US Pat. 6,980,198 B1), which disclose vehicle display apparatuses.

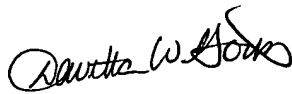
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Davetta W. Goins whose telephone number is 571-272-2957. The examiner can normally be reached on Mon-Fri with every other Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu can be reached on 571-272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



D.W.G.

August 21, 2006

Davetta W. Goins  
Primary Examiner  
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